up

Access DB# 191891

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sabiha Qazi (IC) Examiner #: 7414 Date: 6/2/06

Art Unit: 1660 Phone Number 30 20622 Serial Number: 10/645,431

Mail Box and Bldg/Room Location: 4A45 4C70 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Method to inhibit ethylene responses in plants

Inventors (please provide full names): Jacobson et al

Earliest Priority Filing Date: 8/21/2003

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the compds of cl 1.

elected species is compd 1, ie

ex. 1 on p-16 of specification

(page enclosed

Thank you

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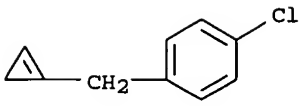
STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: NOBLE	NA Sequence (#)		STN	✓
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	2	Questel/Orbit	
Date Searcher Picked Up: 6/12/06	Bibliographic	✓	Dr.Link	
Date Completed: 6/12/06	Litigation		Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext		Sequence Systems	
Clerical Prep Time: 10	Patent Family		WWW/Internet	
Online Time 40	Other		Other (specify)	

PTO-1590 (8-01)



L23 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:675974 HCAPLUS
DN 137:216702
TI A method to inhibit ethylene responses in plants by a substituted cyclopropene derivative
IN Jacobson, Richard Martin; Kelly, Martha Jean; Wehmeyer, Fiona Linette; Evans, Karen Anderson
PA Rohm and Haas Company, USA
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2002068367	A1	20020906	2002WO-US06339	20020225
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP---1409440	A1	20040421	2002EP-0707944	20020225
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	JP2004532191	T2	20041021	2002JP-0567883	20020225
PRAI	2001US-271588P	P	20010226		
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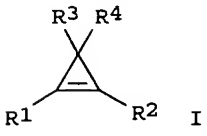
OS MARPAT 137:216702
GI



I

AB The present invention generally relates to methods of inhibiting ethylene responses in plants and plant materials, and particularly relates to methods of inhibiting various ethylene responses including plant maturation and degradation, by exposing plants to cyclopropene derivs. (I) and compns. thereof wherein on of R1 and R3 is H and R2, R4, and the other of R1/R3 are independently selected from H and substitution groups of: (1) at least one substituent on the cyclopropene ring contains a carbocyclic or heterocyclic ring, or (2) a substituent contains silicon, sulfur, phosphorous, or boron, or (3) least one substituent contains from one to four non-hydrogen atoms and at least one substituent contains more than four non-hydrogen atoms. Thus, 1-Chloro-4-cycloprop-1-enylmethylbenzene prepared via these two intermediates 1-(2-Bromoallyl)-4-chlorobenzene and

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=> d que sta l28
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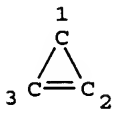

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CONNECT IS M2  RC AT   3
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DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
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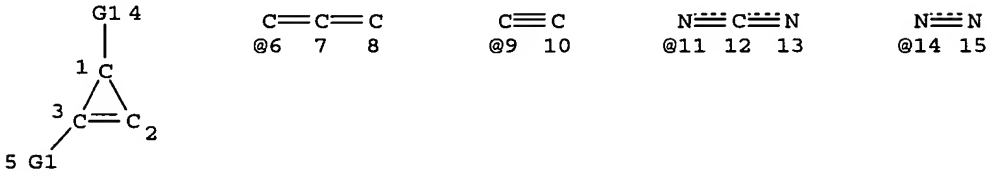

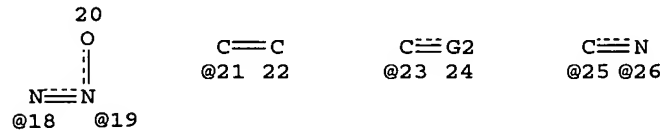

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CONNECT IS E3  RC AT   1
CONNECT IS M2  RC AT   3
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01


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FILE 'HCAPLUS' ENTERED AT 10:04:44 ON 12 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 12 Jun 2006 VOL 144 ISS 25
FILE LAST UPDATED: 11 Jun 2006 (20060611/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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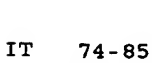
L36 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:259625 HCAPLUS
DN 142:293009
TI Preparation of cyclopropene derivatives as **ethylene** response inhibitors in plants
IN **Jacobson, Richard Martin; Kelly, Martha Jean; Wehmeyer, Fiona Linette; Evans, Karen Anderson**
PA USA
SO U.S. Pat. Appl. Publ., 35 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US2005065033	A1	20050324	2003US-0645431	20030821 <--
PRAI 2003US-0645431		20030821 <--		

OS MARPAT 142:293009
AB The invention relates to methods of inhibiting **ethylene** responses in plants and plant materials, and particularly relates to methods of inhibiting various **ethylene** responses including plant maturation and degradation, by exposing plants to cyclopropene derivs. and compns. thereof wherein: (1) at least one substituent on the cyclopropene ring contains a carbocyclic or heterocyclic ring, or (2) a substituent contains silicon, sulfur, phosphorous, or boron, or (3) least one substituent contains from one to four non-hydrogen atoms and at least one substituent contains more than four non-hydrogen atoms.
IT **74-85-1, Ethylene**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cyclopropene derivs. as **ethylene** response inhibitors in plants)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)



IT **74-85-1, Ethylene**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cyclopropene derivs. as **ethylene** response inhibitors in plants)
IT **147439-85-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate in preparation of cyclopropene derivative **ethylene** response inhibitor in plants)

IT **39492-20-1P**
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation as **ethylene** response inhibitor in plants)

L36 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:675974 HCAPLUS
DN 137:216702
TI A method to inhibit **ethylene** responses in plants by a substituted cyclopropene derivative
IN **Jacobson, Richard Martin; Kelly, Martha Jean; Wehmeyer, Fiona Linette; Evans, Karen Anderson**
PA **Rohm and Haas Company, USA**
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO2002068367	A1	20020906	2002WO-US06339	20020225
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP---1409440	A1	20040421	2002EP-0707944	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP2004532191	T2	20041021	2002JP-0567883	20020225
PRAI 2001US-271588P	P	20010226		
2001US-271590P	P	20010226		
2001US-271591P	P	20010226		
2002WO-US06339	W	20020225		

OS MARPAT 137:216702
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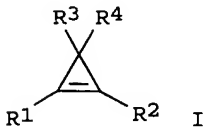


I

AB The present invention generally relates to methods of inhibiting **ethylene** responses in plants and plant materials, and particularly relates to methods of inhibiting various **ethylene** responses including plant maturation and degradation, by exposing plants to cyclopropene derivs. (I) and compns. thereof wherein on of R1 and R3 is H and R2, R4, and the other of R1/R3 are independently selected from H and substitution groups of: (1) at least one substituent on the cyclopropene ring contains a carbocyclic or heterocyclic ring, or (2) a substituent contains silicon, sulfur, phosphorous, or boron, or (3) least one substituent contains from one to four non-hydrogen atoms and at least one substituent contains more than four non-hydrogen atoms. Thus, 1-Chloro-4-cycloprop-1-

enylmethylbenzene prepared via these two intermediates 1-(2-Bromoallyl)-4-chlorobenzene and 2-(4-chlorophenylmethyl)-1,1,2-tribromocyclopropane was sprayed on tomato plant at 10 ppm and showed activity of 10 (completely protecting the plant) on the tomato epinasty test.

IT **74-85-1, Ethylene**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**ethylene** response; method to inhibit **ethylene** responses in plants by a substituted cyclopropene derivative)

RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)

IT **74-85-1, Ethylene**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(**ethylene** response; method to inhibit **ethylene** responses in plants by a substituted cyclopropene derivative)

IT **455272-60-3P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(in preparation of; method to inhibit **ethylene** responses in plants by a substituted cyclopropene derivative)

IT **39492-20-1P**, 1-Octyl-3-carboxycyclopropene **455271-28-0P**, 6-(Trimethylsilyl)hexylcycloprop-2-ene
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of; method to inhibit **ethylene** responses in plants by a substituted cyclopropene derivative)

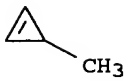
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l39 tot

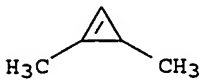
L39 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:743508** HCAPLUS
DN 135:354136
TI The effect of chemical structure on the antagonism by cyclopropenes of **ethylene** responses in banana
AU Sisler, Edward C.; Serek, Margrethe; Roh, Kee-An; Goren, Raphael
CS Department of Biochemistry, North Carolina State University, Raleigh, NC, 27695, USA
SO Plant Growth Regulation (**2001**), 33(2), 107-110
CODEN: PGRED3; ISSN: 0167-6903
PB Kluwer Academic Publishers
DT Journal
LA English
AB Cyclopropene, 1-methylcyclopropene, 3-methylcyclopropene, 1,3-dimethylcyclopropene, 3,3-dimethylcyclopropene, 1,3,3-trimethylcyclopropene, 3-methyl-3-vinylcyclopropene, 3-methyl-3-ethynylcyclopropene, and 1,2-dimethylcyclopropene were tested as antagonists to the **ethylene** receptor in bananas. All of the compds. inactivated the receptor and the bananas did not respond to **ethylene** even at 1000 nL L-1. Large differences were found in the concentration required (0.7-20,000 nL L-1 for 24h) to inactivate the receptor and in the duration of inactivation (3-12 days at 24°C depending on the compound). After this time, the bananas responded to **ethylene** and appeared to ripen normally.

IT **18631-90-8**, 3-Methylcyclopropene **82190-83-8**, 1,3-Dimethylcyclopropene
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(inactivation of **ethylene** receptor in banana by cyclopropene

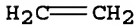
derivs.)
RN 18631-90-8 HCAPLUS
CN Cyclopropene, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 82190-83-8 HCAPLUS
CN Cyclopropene, 1,3-dimethyl- (7CI, 9CI) (CA INDEX NAME)

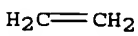


IT **74-85-1, Ethylene**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inactivation of **ethylene** receptor in banana by cyclopropene derivs.)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)



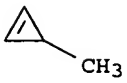
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:712676** HCAPLUS
DN 135:341596
TI Compounds interacting with the **ethylene** receptor
AU Sisler, E. C.; Dupille, E.; Serek, M.; Goren, R.
CS N.C. State University, Raleigh, NC, USA
SO Acta Horticulturae (**2001**), 553(Vol. 1, Proceedings of the 4th International Conference on Postharvest Science, 2000, Volume 1), 159-162
CODEN: AHORA2; ISSN: 0567-7572
PB International Society for Horticultural Science
DT Journal
LA English
AB Some cyclopropenes bind with the **ethylene** receptor and prevent an **ethylene** response. A single 24 h exposure to less than 0.5 nL/L is required in some cases. Others require much higher concns. Some render the plant insensitive for 3, 5, 7, 12 and as long as 25 days. The effect of substitution on cyclopropene activity is discussed. These parameters are being used as a model for developing new compds. The compds. also can be used to radiolabel the receptor.
IT **74-85-1, Ethylene**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cyclopropenes as **ethylene** receptor inhibitors)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)



IT **18631-90-8**, 3-Methylcyclopropene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); BIOL (Biological study)
(interaction with **ethylene** receptor)
RN 18631-90-8 HCAPLUS
CN Cyclopropene, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

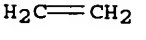
L39 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:658069** HCAPLUS
DN 135:222847
TI Methods of blocking an **ethylene** response in plants using cyclopropene derivatives
IN Sisler, Edward C.
PA North Carolina State University, USA
SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. 6,194,350.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US2001019995	A1	20010906	2001US-0789142	20010220 <--
	US---6365549	B2	20020402		
	US---6194350	B1	20010227	1999US-0448523	19991123 <--
PRAI	1999US-0448523	A2	19991123 <--		
	2000US-193202P	P	20000330 <--		

OS MARPAT 135:222847
GI

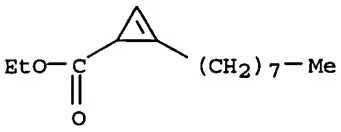
I

AB Cyclopropene derivs. I (n = 1-4; each R independently = (un)saturated, (un)branched, (un)substituted C5-C20 alkyl, alkenyl, or alkynyl, wherein at least one R = (un)saturated, (un)branched, (un)substituted C5 alkyl, alkenyl, or alkynyl) and compns. thereof are used to block **ethylene** receptors in plants and to inhibit plant **ethylene** response, such as ripening of harvested fruits and vegetables, cut flower senescence, and plant abscission.
IT **74-85-1, Ethylene**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cyclopropene derivs. as agents for blocking **ethylene** receptors in plants)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)

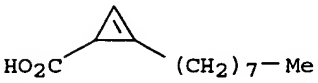


IT **147439-85-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(intermediate in preparation of cyclopropene derivs. as agents for blocking **ethylene** response in plants)

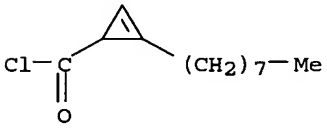
RN 147439-85-8 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl-, ethyl ester (9CI) (CA INDEX NAME)



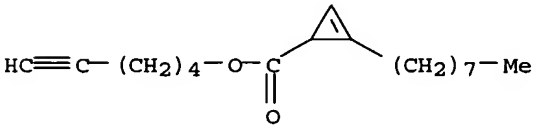
IT **39492-20-1P 341996-53-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate in preparation of cyclopropene derivs. as agents for blocking **ethylene** response in plants)
RN 39492-20-1 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl- (9CI) (CA INDEX NAME)



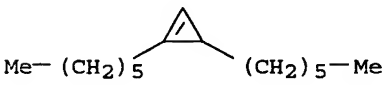
RN 341996-53-0 HCAPLUS
CN 2-Cyclopropene-1-carbonyl chloride, 2-octyl- (9CI) (CA INDEX NAME)



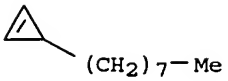
IT **341996-52-9P 341996-75-6P 358627-45-9P**
RL: AGR (Agricultural use); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of cyclopropene derivs. as agents for blocking **ethylene** response in plants)
RN 341996-52-9 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl-, 5-hexynyl ester (9CI) (CA INDEX NAME)



RN 341996-75-6 HCAPLUS
CN Cyclopropene, 1,3-dihexyl- (9CI) (CA INDEX NAME)



RN 358627-45-9 HCAPLUS
CN Cyclopropene, 3-octyl- (9CI) (CA INDEX NAME)



L39 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:396606 HCAPLUS
DN 135:1672
TI Preparation of cyclopropene derivatives as agents for blocking **ethylene** response in plants
IN Sisler, Edward C.
PA North Carolina State University, USA
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2001037663	A2	20010531	2000WO-US31944	20001122 <--
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	CA---2391304	AA	20010531	2000CA-2391304	20001122 <--
	BR2000015750	A	20020716	2000BR-0015750	20001122 <--
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	NZ----519036	A	20040227	2000NZ-0519036	20001122 <--
	AT----260031	E	20040315	2000AT-0980608	20001122 <--
	AU----777916	B2	20041104	2001AU-0017849	20001122 <--
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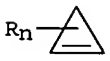
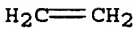


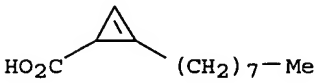
I

AB The cyclopropene derivs. I [R = (un)substituted alkyl, alkenyl or alkynyl; n = 1-4] are prepared as blocking agents of **ethylene** receptors in plants. I inhibit abscission in plants, inhibiting the ripening of picked fruits and picked vegetables, and prolong the vase life of cut flowers.
IT **74-85-1**, **Ethylene**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cyclopropene derivs. as agents for blocking **ethylene** response in plants)
RN 74-85-1 HCAPLUS

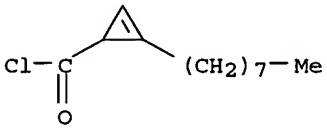
CN Ethene (9CI) (CA INDEX NAME)



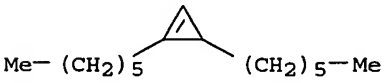
IT **39492-20-1P 341996-53-0P 341996-75-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate in preparation of cyclopropene derivs. as agents for blocking **ethylene** response in plants)
RN 39492-20-1 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl- (9CI) (CA INDEX NAME)



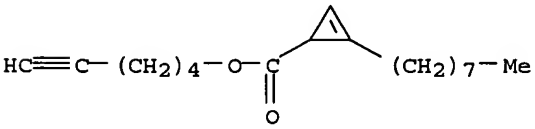
RN 341996-53-0 HCAPLUS
CN 2-Cyclopropene-1-carbonyl chloride, 2-octyl- (9CI) (CA INDEX NAME)



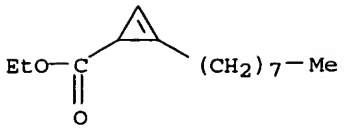
RN 341996-75-6 HCAPLUS
CN Cyclopropene, 1,3-dihexyl- (9CI) (CA INDEX NAME)



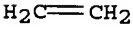
IT **341996-52-9P**
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation as agent for blocking **ethylene** response in plants)
RN 341996-52-9 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl-, 5-hexynyl ester (9CI) (CA INDEX NAME)



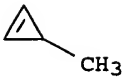
IT **147439-85-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant in preparation of cyclopropene derivs. as agents for blocking **ethylene** response in plants)
RN 147439-85-8 HCAPLUS
CN 2-Cyclopropene-1-carboxylic acid, 2-octyl-, ethyl ester (9CI) (CA INDEX NAME)



L39 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:293502 HCAPLUS
DN 134:337087
TI New developments in **ethylene** control - compounds interacting with the **ethylene** receptor
AU Sisler, E. C.; Serek, M.
CS Department of Biochemistry, North Carolina State University, Raleigh, NC, 27695, USA
SO Acta Horticulturae (2001), 543(Proceedings of the Seventh International Symposium on Postharvest Physiology of Ornamental Plants, 1999), 33-40
CODEN: AHORA2; ISSN: 0567-7572
PB International Society for Horticultural Science
DT Journal; General Review
LA English
AB A review with 20 refs. A number of gaseous compds. that appear to block the **ethylene** receptor have been discovered recently. They inhibit a range of plant responses to **ethylene**, including **ethylene** -induced ripening of fruits, and senescence or abscission of flowers, buds or leaves. The compds. block the receptor, preventing the physiol. action of **ethylene** for up to 12 days at 25 C when provided in a single exposure. Some of the inhibitors are active in very low concns. For example as low a concentration as 0.5 nl.1-1 of 1-methylcyclopropene (1-MCP) is sufficient to protect carnations (Dianthus caryophyllus) flowers for several days against **ethylene**, but many other plant materials require higher concns. These novel inhibitors appear to be suitable for many com. applications including increasing of the vase life of cut flowers and the display life of potted plants. 1-MCP, apparently a non-toxic compound at active concns., has already been developed for com. use and it is available on the US market. A number of other similar compds., many of which would not be gases at room temps. but would slowly evaporate to a gaseous form, have also been prepared and tested as **ethylene** receptor blocking agents. Compds. with a wide range of b.ps. were active and compds. with estimated b.ps. as high as 200C appear to be as active as 1-MCP from the standpoint of concentration and time of protection. The possible com. application of these products will be discussed.
IT **74-85-1**, **Ethylene**, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(inhibition of plant response to **ethylene** with the **ethylene** receptor blockers)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)

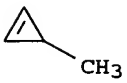


IT **18631-90-8**, 3-Methylcyclopropene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(inhibition of plant response to **ethylene** with the **ethylene** receptor blockers)
RN 18631-90-8 HCAPLUS
CN Cyclopropene, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

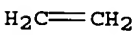


RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:440845 HCAPLUS
DN 131:69650
TI Inhibition of **ethylene** responses by 1-methylcyclopropene and 3-methylcyclopropene
AU Sisler, Edward C.; Serek, Margrethe; Dupille, Eve; Goren, Raphael
CS Department of Biochemistry, North Carolina State University, Raleigh, NC, 27695, USA
SO Plant Growth Regulation (1999), 27(2), 105-111
CODEN: PGRED3; ISSN: 0167-6903
PB Kluwer Academic Publishers
DT Journal
LA English
AB 3-Methylcyclopropene (3-MCP) binds to the **ethylene** receptor and blocks it for several days, but concns. wise is less effective than 1-methylcyclopropene (1-MCP). In diverse **ethylene**-responsive systems, including ripening of mature-green bananas (Musa sapientum L.), inhibition of growth in etiolated pea (Pisum sativum L.) seedlings, abscission of orange (Citrus sinensis L.) leaf explants and mung bean (Vigna radiata L.) leaves, and wilting of campanula (Campanula carpatica) and kalanchoe (Kalanchoe blossfeldiana) florets, full inhibition of the **ethylene** response required higher concns. of 3-MCP. Depending on the exptl. system, the effective concentration of 3-MCP was from 5 to 10 times higher than that required for 1-MCP.
IT **18631-90-8**, 3-Methylcyclopropene
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(inhibition of **ethylene** responses by 1-methylcyclopropene and 3-methylcyclopropene)
RN 18631-90-8 HCAPLUS
CN Cyclopropene, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



IT **74-85-1**, **Ethene**, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of **ethylene** responses by 1-methylcyclopropene and 3-methylcyclopropene)
RN 74-85-1 HCAPLUS
CN Ethene (9CI) (CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d bib abs hitstr l42 tot

L42 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1966:447090 HCAPLUS
DN 65:47090
OREF 65:8731h,8732a
TI Molecular orbital calculations of 1,5-dicyclopropenylcyclooctatetraene
AU Bochvar, D. A.; Tutkevich, A. V.
CS Inst. Heteroorg. Compds., Moscow
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1966), (4), 756-7
CODEN: IASKA6; ISSN: 0002-3353
DT Journal
LA Russian
AB Elementary mol. orbital calcns. were made for electron density values at the various atoms of the title compound as a hypothetical case. From the results it was concluded that the resonance energy of such a structure may suffice to make it stable through the existence of a planar 8-membered ring system.

L42 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:447089 HCAPLUS
DN 65:47089
OREF 65:8731g-h
TI Exchange reactions of silylamides
AU Klebe, Johann F.; Bush, John B., Jr.
CS Gen. Elec. Res. Lab., Schenectady, NY
SO Intern. Symp. Organosilicon Chem., Sci. Commun., Prague (1965) 328-34
DT Journal
LA English
AB Silylanilides exist as tautomeric mixts. of N-silylamides MeCON(SiMe3)Ph and O-silylacetimidates MeC(OSiMe3):NPh. The silyl exchange between O and N is slow enough at temps. below .apprx.10° to allow detection of both forms together by means of proton magnetic resonance spectroscopy. Detns. of the equilibrium compns. of mixts. of ring-substituted anilides in their silyl and proton forms show that thermodynamic silylating power increases with increasing electron withdrawing character of the ring substituent. Rate consts. for the alcoholysis of several silylanilides and a scale of kinetic silylating power is established.

L42 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:32450 HCAPLUS
DN 64:32450
OREF 64:5987b-c
TI Photochemistry of cyclopropylacrylic esters
AU Jorgensen, Margaret J.; Heathcock, Clayton H.
CS Univ. of Calif., Berkeley
SO Journal of the American Chemical Society (1965), 87(22), 5264-6
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
AB The uv irradiation (with Vycor filter) of ethyl 3-cyclopropyl-2-butenoate, ethyl 3-cyclopropylpropenoate, and ethyl 3-cyclopropyl-2-methyl-2-butenoate to .apprx.30% conversion, yields 3 kinds of cyclic rearrangement products: a cyclopentenecarboxylate by rearrangement with no loss of C atoms, a cyclopropenecarboxylate, and an ethoxyfuran by loss of C2H4 with rearrangement. The products and reactants are given along with the reaction mechanisms.

L42 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:32449 HCAPLUS
DN 64:32449
OREF 64:5986h,5987a-b
TI Sensitized radiolytic isomerization of stilbene
AU Lehmann, H. P.; Stein, G.; Fischer, E.
CS Weizmann Inst. Sci., Rehovoth, Israel
SO Chemical Communications (London) (1965), (22), 583-5
CODEN: CCOMA8; ISSN: 0009-241X
DT Journal
LA English

AB cf. Nosworthy, CA 63, 6529b; Cundall and Griffiths, CA 63, 15758e. Radiolysis of 10-41M solns. of cis- or trans-stilbene in aliphatic hydrocarbons gave mainly decomposition products, but radiolysis of benzene solns. gave little decomposition and much isomerization. Either 200 kv. x-rays or 60Co γ-radiation was used, the dose rate being .apprx.3 + 1017 ev./min.-ml. The presence of O or anthracene in the solns. reduced Gisom, particularly in dilute solns., while naphthalene, phenanthrene, and triphenylene all increase Gisom, and in their presence a stationary state is reached (starting from either the cis or trans isomer) in which [cis]/[trans] ≈1.6. Biacetyl is unique in enhancing the trans → cis conversion preferentially, the stationary state being one with .apprx.72% cis isomer. Mechanistically it is assumed that absorption of radiation by benzene forms an active species able to isomerize stilbene mols. Added solutes compete with stilbene for "active" benzene mols.; the products of the solute- "active"-benzene reaction will decide whether the isomerization will be enhanced or retarded. If the solute-"active" benzene reaction product does not react with stilbene, isomerization will be retarded. If it does react the isomerization will either be unaffected or enhanced, depending on the relative lifetimes of "active" benzene and "active" product.

L42 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1965:90652 HCAPLUS
DN 62:90652
OREF 62:16151e-g
TI 1,2-Benzo-5,6-dimethylcaline
AU Prinzback, H.; D, Seip.; U, Fischer.
CS Univ. Freiburg/Br., Germany
SO Angew. Chem. (1965), 77(6), 258
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB Indenylmagnesium bromide (30 millimoles) was made to react with 20 millimoles dimethylcyclopropenyl fluoroborate in tetrahydrofuran at -20° to give a mixture of 5 parts Ia and 1 part Ib, b0.01 68-70°, yield 35%. Under alkaline conditions, I isomerized to cyclopropenylbenzofulvene. Treating Ia with Ph3CBF4 in CHCl3 at 0° 30 min. gave 50-5% II, m. 98-9°. With a 5-10 fold excess of Me3N or C5H5N, II gave 1,2-benzo-5,6-dimethylcalicene. Cyclopropenylbenzofulvenes, obtained by the substitution of Ia with o-ClC6H4CHO or o-MeOC6H4CHO, did not yield benzocalicenes under the conditions similar to the conversion of cycloheptatrienylbenzofulvenes into benzosesquifulvalenes. All compds. synthesized were characterized by their ur, ir, and N.M.R. spectra.

L42 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:454973 HCAPLUS
DN 61:54973
OREF 61:9535e-h,9536a-f
TI Constituents of Erythroxylon monogynum. II. Erythroxydiols X and Y. Two novel skeletal types of diterpenoids
AU Connolly, J. D.; McCrindle, R.; Murray, R. D. H.; Overton, K. H.; Melera, A.
CS Univ. Glasgow, UK
SO Tetrahedron Letters (1964), (27-28), 1859-66
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 60, 14548a. The trunk wood of E. monogynum extracted with ligroine and the extractive separated by chromatography of the acetonides on AgNO3-silica gel gave a series of erythroxydiols: X, m. 124-6°, [α]D 12° (acetonide m. 89-90°, [α]D 14°); Y, m. 144-6°, [α]D 87° (acetonide m. 109-110°, [α]D -23°); Z, m. 136-8°, [α]D -35° (acetonide m. 108-10°, [α]D -22°); together with 2

minor constituents isolated as the acetonides: triol P acetonide, m. 142-4°, [α]D 31°, and triol monoacetate Q acetonide, m. 111-13°, [α]D -17°. The diol X (I), C20H34O2, nuclear magnetic resonance (n.m.r.) doublets at τ 9.46, 9.88 (J = 4.5 cycles/sec.) is tetracyclic and contains a cyclopropane ring. The diol Y (II, R = CH2) (III), λ 200, 210, 220 mμ (ε 3500, 175, 0), ν 905 cm.-1 (Nujol), n.m.r. singlet at τ 5.5 gave a dihydro derivative, transparent above 210mμ and is tricyclic. I gave a monoacetate, m. 116-18°, and a diacetate, m. 106-7°; n.m.r. ABX system 5.56, 6.02, 5.08 τ, defining I as a primary-secondary vicinal glycol with the adjacent C atom fully substituted. The 15-oxo derivative of I 16-acetate, m. 95-6°, 104-6°, showed a n.m.r. spectrum lacking protons on the C atom adjacent to CO, with paramagnetic shift of 15 cycles/sec. for 1 Me group suggesting attachment to C-13. The ABX system in III diacetate was superimposable on that of I diacetate and the nature and environment of the diol suggested its location on a pimarene skeleton at C-15 and C-16 as in darutigenol with the vinylidene group at C-4. Ozonolysis of III acetonide (n.m.r. singlets at τ 9.19, 9.12, 8.94) to the norketone II (R = O), m. 138-40°, ν 1710, 1420 cm.-1 (CCl_4), n.m.r. singlets at τ 9.19, 9.15, 8.89 (absence of 2H singlet at τ 5.5); and isomerization of III acetonide to Z (IV) acetonide, λ 207, 210, 220 mμ (ε 2900, 2010, 1000), n.m.r. multiplet at τ 4.85 supported the assigned structure of III. A possible alternative structure for III was excluded by its interconversion with rosenonolactone (V). Treatment of the acetonides of I or III with dry HCl-$CHCl_3$ at 20° 30 min. gave mixts. of acetonides containing the same 3 major products: III acetonide; IV acetonide, [α]D -22°; and a new diol (VI) acetonide, m. 108-10°, [α]D -83°, λ 200, 210, 220 mμ (ε 5250, 2800, 700), no n.m.r. signals below τ 6.0., T.N.M. +ve. VI was differentiated from the alternative olefin by the n.m.r. spectrum, direct comparison of the derived enantio diene (VII, R = Me) (VIII) with Δ8(9) pimaradiene, and synthesis of VIII from V. The formulation of I was preferred to that of a possible alternative structure on the grounds that the mass spectra of the acetonides of I and III are indistinguishable. The constitution of III and its congeners was confirmed by conversion of V and the ene-diol IV into the antipodal dienes, which addnl. defined the stereochemistry at C-8 and C-13 and the absolute configuration of I and III. Treatment of V with $LiAlH_4$, conversion of the triol into the ether p-toluene-sulfonate (IX, R = p-$MeC_6H_4SO_3$), and further reduction gave the ether IX(R = H), m. 49-51°, also obtained from desoxyrosenonolactone. The ether was smoothly transformed by alc. HCl into the dienol VII (R = CH_2OH), m. 116-18°. Oxidation to the aldehyde VII (R = CHO), conversion into the thioketal, and desulfurization with Raney Ni in Me_2CO gave the diene (VIII), [α]D -116°, identical in all respects except in rotation with the diene, [α]D 110°, obtained from IV, m. 125-8°. I and III are thus antipodally related to V and to the stachenols of E. monogynum. Triol acetate Q (X), isolated as the acetonide, $C_{25}H_{40}O_4$, m. 111-13°, τ 6.0-6.4, was tentatively formulated as shown on the observations that the acetonide and cyclopropane (τ 9.47, 9.85) regions of the n.m.r. spectrum are virtually identical with those of I. The acetate function (ν 1720, 1245 cm.-1, n.m.r. singlet at τ 8.03, quartet at τ 5.07) is secondary and probably equatorial. The triol P (XI) isolated as the acetonide, m. 142-4°, probably contains the diol system of I and III (characteristic multiplet at τ 6.0-6.4, addnl. tertiary OH group (ν 3625 cm.-1), absence of CHOH proton in n.m.r. and no unsatn. (T.N.M. -ve, transparent above λ 200 mμ). The cyclopropane ring in I and X may be a stabilized biogenetic intermediate in the formation of III from a normal pimarane precursor.

L42 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:454972 HCAPLUS
DN 61:54972
OREF 61:9535b-e
TI Photochemical reactions. XIII. A total synthesis of (±)thujopsene

AU Beuchi, G.; White, J. D.
CS Massachusetts Inst. of Technol., Cambridge
SO Journal of the American Chemical Society (1964), 86(14), 2884-7
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 59, 6307e. The structure I deduced by Erdtman and Norin (CA 54, 24845e) for thujopsene was confirmed by the total synthesis of (+)-I. β-Cyclocitral in iso-PrOH added to NaBH4 in absolute EtOH iso-PrOH) yielded 68.0 g. β-cyclogeraniol (II). II refluxed with Hg(OAc)2 yielded β-cyclogeranyl vinyl ether (III), and unreacted II. III (136 g.) passed at 320° with N through a glass tube packed with glass helices gave 1,3,3-trimethyl-2-methylenecyclohexanecarboxaldehyde(IV). IV, HC(OEt)3, and p-MeC6H4SO3H in absolute EtOH kept 24 hrs. at room temperature gave the di-Et acetal (V) of IV. V and 10% ZnCl2-EtOAc suspension treated with EtOCH:CHMe, heated and stirred with AcONa and H2O in AcOH gave IV, and a mixture (VI) of cis- and trans-2-methyl-4-(1,3,3-trimethyl-2-methylenecyclohexyl)crotonaldehyde, containing 92% of one and 8% of the other isomer. The mixed VI treated with AcONa gave the pure major isomeric VI. Mixed VI and p-MeC6H4SO2NHNH2 in EtOH gave oily mixture of the tosylhydrazones (VII) of VI. The oily VII mixture chromatographed on Al2O3 gave the major isomer and the minor isomer. Mixed VII in isooctane containing (CH2OMe)2 treated under N with NaH and then irradiated 1 hr. while being treated with a stream of N, and the resulting crude yellow oil chromatographed on Al2O3 yielded VIII and I.

L42 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:74930 HCAPLUS
DN 60:74930
OREF 60:13125e-f
TI Theoretical prediction of the properties of compounds. VI. Cyclobutadiene derivatives
AU Lee, H. S.
CS Univ. of North Dakota, Grand Forks
SO Huaxue (1963), (2), 59-63
CODEN: HUHSA2; ISSN: 0441-3768
DT Journal
LA Unavailable
AB Mol. orbital calcns. were made on 12 unknown alternant cyclobutadiene derivatives. Predictions of the stabilities and properties of these compds. were presented.

L42 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:74929 HCAPLUS
DN 60:74929
OREF 60:13125e-f
TI Theoretical prediction of the properties of compounds. V. Polycyclic systems containing a four-membered ring
AU Lee, H. S.
CS Univ. of North Dakota, Grand Forks
SO Huaxue (1963), (2), 53-8
CODEN: HUHSA2; ISSN: 0441-3768
DT Journal
LA Unavailable
AB Predictions were made of the chemistry of 10 polycyclic alternant and nonalternant hydrocarbons, based on the values of various theoretical quantities obtained by the linear combination atomic orbitals (LCAO) mol. orbital approximation

L42 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:74928 HCAPLUS
DN 60:74928
OREF 60:13125e
TI Theoretical prediction of the properties of compounds. IV. Odd-membered tricyclic systems containing a central four-membered ring

AU Lee, H. S.
CS Univ. of North Dakota, Grand Forks
SO Huaxue (1963), (2), 47-52
CODEN: HUHSA2; ISSN: 0441-3768
DT Journal
LA Unavailable
AB cf. CA 59, 14719f; 60, 6724h. Mol. orbital calcns. were made on 9 unknown tricyclic hydrocarbons containing a central fused cyclobutadiene ring. The stabilities and chemical properties of these compds. were discussed

L42 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:74927 HCAPLUS
DN 60:74927
OREF 60:13125c-e
TI Catalytic conversions of isopropyl alcohol and Tetralin on gallium oxide
AU Tolstopyatova, A. A.; Balandin, A. A.; Matyushenko, L. A.
CS Inst. Org. Chem., Acad. Sci. USSR, Moscow
SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1964), (2), 258-62
CODEN: IASKA6; ISSN: 0002-3353
DT Journal
LA Unavailable
AB The decomposition of iso-PrOH at 260-320° and of Tetralin at 340-470° on Ga2O3 was studied. Dehydrogenation and dehydration of iso-Pr-OH took place simultaneously. On the basis of the kinetics of formation of H and C3H6, resp., the energies of activation of these 2 reactions were determined at ε2 = 8.3 kcal./mole and ε3 = 11.5 kcal./mole. Tetralin was dehydrogenated with the formation of naphthalene. The activation energy of Tetralin dehydrogenation determined on the basis of the kinetics of H formation was ε1 = 32.0. The energies of bonds formed by H, C, and O with the active centers of Ga2O3 were calculated from the values of ε1, ε2, and ε8 (CA 41, 1920b; 55, 18250c): they were 53.5, 23.8, and 67.6 kcal./mole, resp.

L42 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:9388 HCAPLUS
DN 60:9388
OREF 60:1609d-e
TI The base-induced pyrolysis of tosylhydrazones of α,β-unsaturated aldehydes and ketones. A convenient synthesis of some alkylcyclopropenes
AU Closs, Gerhard L.; Closs, Liselotte E.; Boll, Walter A.
CS Univ. of Chicago
SO Journal of the American Chemical Society (1963), 85(23), 3796-800
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
OS CASREACT 60:9388
AB Tosylhydrazones of a number of α,β-unsatd. aldehydes and ketones have been prepared On reaction with NaOMe in aprotic media at 160-220°, alkyl-substituted cyclopropenes are formed. The yields vary from excellent to poor depending mainly on the degree of β-substitution of the tosylhydrazone. The sequence tosylhydrazone → diazoalkene → alkenylcarbene → cyclopropene is proposed as the most suitable description of the multistep reaction.

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L40 ANSWER 1 OF 6 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA65:8731h CAOLD
TI mol.-orbital calcns. of 1,5-dicyclopropenylcyclooctatetraene
AU Bochvar, D. A.; Tutkevich, A. V.
IT **10557-92-3**

L40 ANSWER 2 OF 6 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA64:5987b CAOLD
TI photochemistry of cyclopropylacrylic esters
AU Jorgenson, Margaret J.; Heathcock, C.
IT 621-08-9 825-78-5 5808-99-1 5809-00-7 5809-01-8 5809-02-9
5809-03-0 **5809-04-1** 5809-05-2 5809-06-3 5809-07-4

L40 ANSWER 3 OF 6 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA62:16151e CAOLD
TI 1,2-benzo-5,6-dimethylcalicene
AU Prinzbach, Horst; Seip, D.; Fischer, U.
IT 1013-84-9 **1078-80-4** 1134-27-6 1134-28-7 1270-61-7
95027-76-2

L40 ANSWER 4 OF 6 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA61:9535e CAOLD
TI constituents of Erythroxylum monogynum - (II) erythroxydiols X and Y-two skeletal types of diterpenoids
AU Connolly, Joseph D.; McCrindle, R.; Murray, R. D. H.; Overton, K. H.; Melera, A.
IT 1909-80-4 4872-09-7 4872-10-0 4872-12-2 4872-14-4 4891-83-2
4905-56-0 4905-58-2 5046-37-7 6750-18-1 6980-42-3
97499-07-5 105991-78-4 106095-83-4

L40 ANSWER 5 OF 6 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA60:13125e CAOLD
TI theoretical prediction of the properties of compds. - (IV) odd-membered tricyclic systems containing a central four-membered ring, (V) polycyclic systems containing a four-membered ring, (VI) cyclobutadiene derivs., (VII) systems containing polymethylene-substituted four-membered rings, (VIII) odd-membered systems containing three-membered rings
AU Lee, Hung Suen
IT 259-56-3 286-83-9 670-85-9 3227-91-6 4023-67-0 5291-90-7
5873-38-1 7001-11-8 18631-85-1 20265-84-3 24447-42-5 24495-97-4
24501-51-7 24501-52-8 24540-13-4 24540-14-5 24540-16-7 24540-17-8
24988-60-1 54031-17-3 56460-21-0 56460-23-2 **61082-23-3**
61960-82-5 65332-03-8 67789-52-0 69038-28-4 83320-86-9
89282-29-1 89379-31-7 89379-33-9 89793-98-6 89793-99-7
89899-15-0 89975-59-7 90001-16-4 90323-56-1 90323-57-2 90350-19-9
90350-20-2 90721-21-4 90721-22-5 90721-23-6 90721-24-7 90721-25-8
90766-18-0 90766-19-1 90886-78-5 90942-16-8 90942-17-9 90942-18-0
91085-97-1 91844-03-0 92148-25-9 **92432-96-7** 92545-79-4
92545-80-7 92545-81-8 92644-31-0 92644-32-1 92673-42-2 92847-16-0
92847-17-1 **93029-81-3** 93716-73-5 93716-74-6 94548-85-3
95371-97-4 98840-84-7 111164-57-9 111164-58-0 111164-59-1

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L40  ANSWER 6 OF 6  HCAOLD  COPYRIGHT 2006 ACS on STN
AN   CA60:1609d  CAOLD
TI   base-induced pyrolysis of tosylhydrazones of α,β-unsatd.
     aldehydes and ketones-convenient synthesis of some alkylcyclopropenes
AU   Closs, Gerhard L.; Closs, L. E.; Boell, W.
IT   3664-56-0   3907-06-0   5362-76-5   5363-15-5  17336-63-9
     18631-90-8  34785-53-0  61491-00-7  82190-83-8
     89600-54-4  90642-41-4  91557-68-5  91557-69-6  93428-86-5  93428-87-6


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DICTIONARY FILE UPDATES:  11 JUN 2006  HIGHEST RN 887399-72-6

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* the IDE default display format and the ED field has been added,   *
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* available and contains the CA role and document type information. *
*                                                                    *
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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
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L43  ANSWER 1 OF 10  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   97499-07-5  REGISTRY
ED   Entered STN:  04 Aug 1985
CN   Methane, (2-methyl-2-cyclopropen-1-yl)(1,3,3-trimethyl-2-
     methylenecyclohexyl)- (7CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C15 H24
SR   CAOLD
LC   STN Files:   BEILSTEIN*, CA, CAOLD, CAPLUS
         (*File contains numerically searchable property data)
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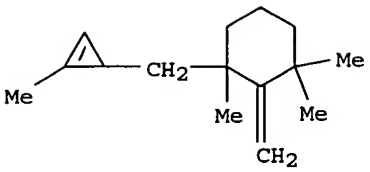

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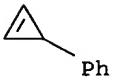
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 61:54972

L43 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **93029-81-3** REGISTRY
ED Entered STN: 18 Dec 1984
CN Benzene, (2-cyclopropen-1-yl)- (7CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Phenylcyclopropene
FS 3D CONCORD
MF C9 H8
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



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REFERENCE 1: 143:326282

REFERENCE 2: 136:309512

REFERENCE 3: 134:131148

REFERENCE 4: 131:336665

REFERENCE 5: 131:257059

REFERENCE 6: 116:193571

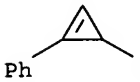
REFERENCE 7: 105:78225

REFERENCE 8: 60:74932

REFERENCE 9: 60:74930

L43 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **92432-96-7** REGISTRY
ED Entered STN: 17 Dec 1984
CN Benzene, 1,1'-(2-cyclopropene-1,2-diyl)bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Cyclopropene, 1,3-diphenyl- (7CI)
OTHER NAMES:
CN 1,3-Diphenylcyclopropene
FS 3D CONCORD
MF C15 H12
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 131:336665

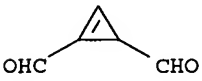
REFERENCE 2: 131:257059

REFERENCE 3: 104:50573

REFERENCE 4: 60:74932

REFERENCE 5: 60:74930

L43 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **89282-29-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Cyclopropene-1,2-dicarboxaldehyde (7CI) (CA INDEX NAME)
FS 3D CONCORD
MF C5 H4 O2
LC STN Files: CA, CAOLD, CAPLUS



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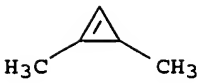
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 60:74932

REFERENCE 2: 60:74930

L43 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **82190-83-8** REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropene, 1,3-dimethyl- (7CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,3-Dimethylcyclopropene
FS 3D CONCORD
MF C5 H8
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
CHEMINFORMRX, TOXCENTER

(*File contains numerically searchable property data)



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14 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:262852

REFERENCE 2: 135:354136

REFERENCE 3: 135:340441

REFERENCE 4: 135:303516

REFERENCE 5: 134:71220

REFERENCE 6: 131:336665

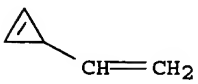
REFERENCE 7: 131:257059

REFERENCE 8: 131:242889

REFERENCE 9: 130:167917

REFERENCE 10: 127:50206

L43 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN 61082-23-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropene, 3-ethenyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclopropene, 3-vinyl- (7CI)
OTHER NAMES:
CN 3-Ethenylcyclopropene
CN 3-Vinylcyclopropene
FS 3D CONCORD
MF C5 H6
LC STN Files: CA, CAOLD, CAPLUS, CASREACT



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24 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 132:237195

REFERENCE 2: 131:336665

REFERENCE 3: 131:257059

REFERENCE 4: 129:81347

REFERENCE 5: 128:185234

REFERENCE 6: 124:86161

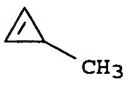
REFERENCE 7: 123:285269

REFERENCE 8: 122:9511

REFERENCE 9: 121:300211

REFERENCE 10: 120:270783

L43 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN 18631-90-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cyclopropene, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Methylcyclopropene
FS 3D CONCORD
MF C4 H6
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

55 REFERENCES IN FILE CA (1907 TO DATE)
55 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:411970

REFERENCE 2: 142:391925

REFERENCE 3: 142:197762

REFERENCE 4: 141:190515

REFERENCE 5: 140:356826

REFERENCE 6: 137:78719

REFERENCE 7: 136:262852

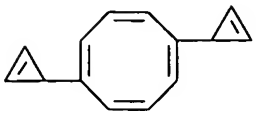
REFERENCE 8: 135:354136

REFERENCE 9: 135:341596

REFERENCE 10: 135:340441

L43 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN 10557-92-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,3,5,7-Cyclooctatetraene, 1,5-di-2-cyclopropen-1-yl- (7CI, 8CI) (CA

INDEX NAME)
FS 3D CONCORD
MF C14 H12
LC STN Files: CA, CAOLD, CAPLUS

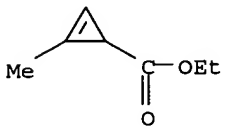


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 65:47090

L43 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **5809-04-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Cyclopropene-1-carboxylic acid, 2-methyl-, ethyl ester (7CI, 8CI, 9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C7 H10 O2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:321023

REFERENCE 2: 94:83858

REFERENCE 3: 88:190136

REFERENCE 4: 83:147151

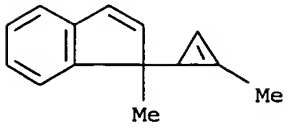
REFERENCE 5: 81:37280

REFERENCE 6: 72:2843

REFERENCE 7: 64:32450

L43 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2006 ACS on STN
RN **1078-80-4** REGISTRY
ED Entered STN: 16 Nov 1984
CN Indene, 1-methyl-1-(2-methyl-2-cyclopropen-1-yl)- (7CI, 8CI) (CA INDEX NAME)
FS 3D CONCORD

MF C14 H14
LC STN Files: CA, CAOLD, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 62:90652

=> d his

(FILE 'HOME' ENTERED AT 09:00:50 ON 12 JUN 2006)

FILE 'HCAPLUS' ENTERED AT 09:02:49 ON 12 JUN 2006
L1 1 US2005065033/PN OR US2003-645431/AP,PRN
E JACOBSON R/AU
L2 19 E3,E12
E JACOBSON D/AU
L3 60 E3,E11
E JACOBSON DICK/AU
E JACOBSON RICH/AU
L4 47 E4,E9-10
E KELLY M/AU
L5 537 E3,E18-19
E KELLY MARTHA/AU
L6 29 E4-5
E WEHMEYER F/AU
L7 7 E4-5
E EVANS K/AU
L8 108 E3-4
E EVANS KAREN/AU
L9 23 E3-5
L10 8496 (ROHM (1A)HAAS)/CS,PA

FILE 'REGISTRY' ENTERED AT 09:06:01 ON 12 JUN 2006

FILE 'HCAPLUS' ENTERED AT 09:06:02 ON 12 JUN 2006
L11 TRA L1 1- RN : 155 TERMS

FILE 'REGISTRY' ENTERED AT 09:06:02 ON 12 JUN 2006
L12 155 SEA L11
L13 123 L12 AND C3/ES
L14 13 L13 AND SI/ELS
L15 3 L14 AND C10H20SI
L16 1 CYCLOPROPENE/CN
L17 6602 1.13.2/RID
L18 STR
L19 50 L18 CSS SAM SUB=L17
L20 960 L18 CSS FULL SUB=L17
SAV TEM L20 QAZI431F0/A
L21 4 L17 AND C10H9CL
SEL RN L21 1
L22 1 E1 AND L21

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     FILE 'HCAPLUS' ENTERED AT 09:15:44 ON 12 JUN 2006
L23            3 L22

     FILE 'REGISTRY' ENTERED AT 09:17:46 ON 12 JUN 2006
L24              STR L18
L25              STR L24
L26              STR L25
L27           32 L26 SAM SUB=L20
L28          529 L26 FULL SUB=L20
                 SAV TEM L28 QAZI431F1/A
L29          525 L28 NOT SIC2/ES
L30          387 L29 NOT ESTER
L31            1 ETHYLENE/CN

     FILE 'HCAPLUS' ENTERED AT 09:55:59 ON 12 JUN 2006
L32        91485 L31
L33       545017 ETHENE OR ETHYLENE OR ACETENE OR BICARBURRETT? OR ELAYL OR OLEF
L34          452 L29
L35           35 L34 AND L32-33
L36            2 L35 AND L1-10
L37           33 L35 NOT L36
L38           31 L37 AND (PY<=2003 OR AY<=2003 OR PRY<=2003)
                 SEL AN 5 7-10 14
L39            6 E2-13 AND L38

     FILE 'HCAOLD' ENTERED AT 10:05:12 ON 12 JUN 2006
L40            6 L29
L41            0 L40 AND L32-33
                 SEL AN L40
                 EDIT /AN /OREF

     FILE 'HCAPLUS' ENTERED AT 10:06:20 ON 12 JUN 2006
L42           12 E14-19

     FILE 'HCAOLD' ENTERED AT 10:06:34 ON 12 JUN 2006
                 SEL HIT RN L40

     FILE 'REGISTRY' ENTERED AT 10:06:44 ON 12 JUN 2006
L43           10 E20-29

=>
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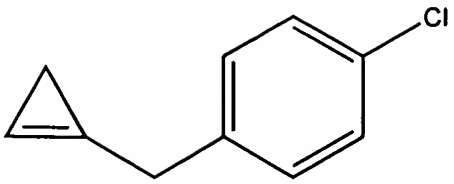

1-chloro-4-cycloprop-1-enylmethyl-benzene

$C_{10}H_9Cl$